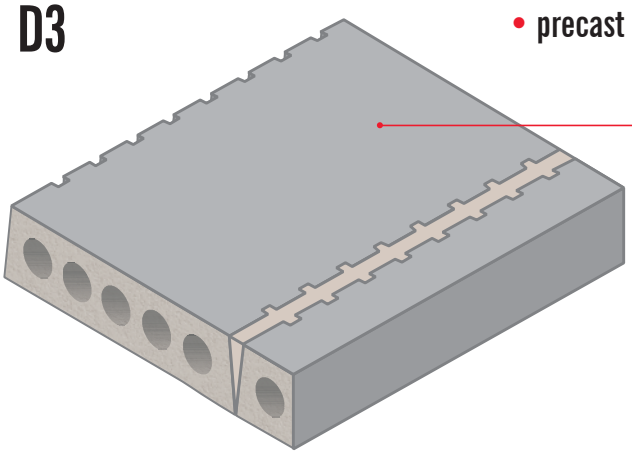
Stowell solutions for domestic floors

D3 and D4 ceiling finish optional (not shown)

D3

- **precast concrete plank**

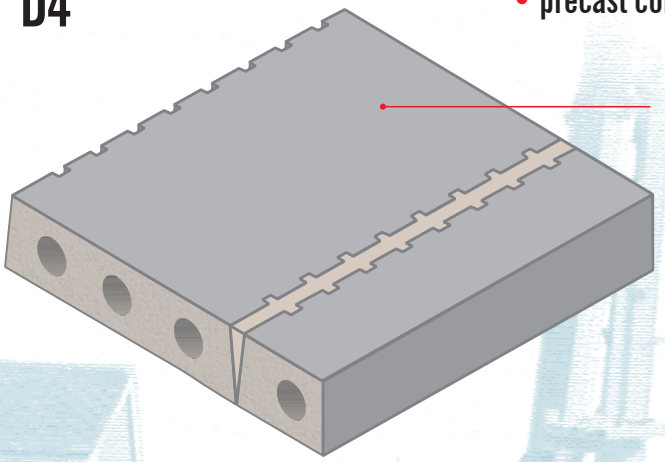


Structural floor –
Stowell hollowcore HC260 concrete plank
Regulating screed optional (not shown)

A required minimum floor mass of 180 kg/m^2 can be exceeded by using Stowell hollowcore 155mm deep HC260 concrete planks (five hole). When grouted a floor mass of approximately 280kg/m^2 is obtained before adding toppings, floors and ceilings.

D4

- **precast concrete plank**



Structural floor –
Stowell hollowcore HC300 concrete plank
Regulating screed optional (not shown)

A required minimum floor mass of 180 kg/m^2 can be exceeded by using Stowell hollowcore 155mm deep HC300 concrete planks (three hole). When grouted a floor mass of approximately 320kg/m^2 is obtained before adding toppings, floors and ceilings.

Stowell Concrete reserve the right to supply HC300 if stock of HC260 is not available

Part E (resistance to passage of sound) of the Building Regulations (England and Wales) Section 5: Internal walls and floors for new buildings, requires a minimum floor mass per unit area. For joist* and block the floor mass is 220kg/m^2 and for hollowcore concrete planks the requirement is a minimum 180kg/m^2.

To satisfy Part E (Resistance to passage of sound) of Building Regulations, England & Wales Section 5: Internal walls and floors for new buildings, both the regulating screed and ceiling finish are optional.

However, to achieve larger spans, a reinforced structural concrete topping needs to be bonded to the units. Please see the load span tables overleaf and guidelines for structural concrete topping applied to reinforced concrete flooring.

* commonly known as beam

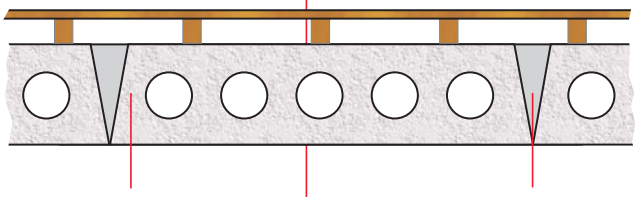
STOWELL CONCRETE LIMITED

Load span tables for D3 and D4

...for guidance only

Domestic floor utilising timber & batten only

HC260/HC300	Loadings in kN/m²		
Imposed live load	1.5	2.0	2.5
Partition allowance	0.5	0.5	1.0
Finishes & ceilings	0.3	0.3	0.3
	Max clear span in metres		
8mm reinforcement type A	4.15	4.05	3.80
10mm reinforcement type B	4.40	4.30	4.05
12mm reinforcement type C	4.55	4.45	4.20
16mm reinforcement type D	4.70	4.55	4.35



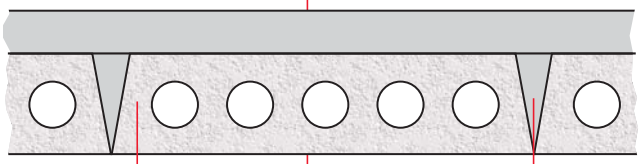
155mm deep Stowell HC260 (shown) or Stowell HC300

Joints must be kept clean until concrete is poured

Domestic floor utilising screed

HC260/HC300	Loadings in kN/m²		
Imposed live load	1.5	2.0	2.5
Partition allowance	0.5	0.5	1.0
Finishes & ceilings	0.3	0.3	0.3
	Max clear span in metres		
8mm reinforcement type A	3.80	3.75	3.55
10mm reinforcement type B	4.10	4.00	3.80
12mm reinforcement type C	4.25	4.15	4.00
16mm reinforcement type D	4.40	4.30	4.15

65mm screed



155mm deep Stowell HC260 (shown) or Stowell HC300

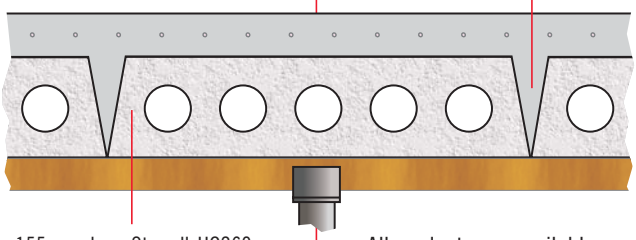
Joints must be kept clean until concrete is poured

Domestic floor utilising structural concrete bonded to Stowell hollowcore and propped*

HC260/HC300	Loadings in kN/m²		
Imposed live load	1.5	2.0	2.5
Partition allowance	0.5	0.5	1.0
Finishes & ceilings	0.3	0.3	0.3
	Max clear span in metres		
8mm reinforcement type A	5.40	5.30	5.05
10mm reinforcement type B	6.00	5.85	5.60
12mm reinforcement type C	6.40	6.25	6.00
16mm reinforcement type D	6.80	6.65	6.45

min 70mm concrete C28/35
max 10mm aggregate
S3 + A142 mesh

Joints must be kept clean until concrete is poured



155mm deep Stowell HC260 (shown) or Stowell HC300

These tables refer to simple, uniformly distributed loads only and is only a guide.
*Please see guidelines for stuctural concrete topping applied to reinforced precast concrete flooring.

All products are available ex works.
Prices on application.
Telephone our sales office for further information and quotations.

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